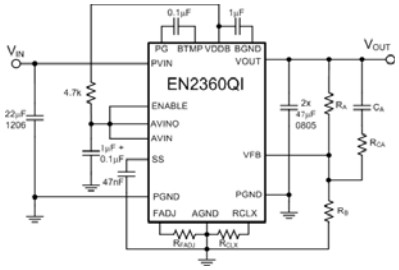
EN2360QI: 6A PowerSoC DC-DC Step-Down Converter



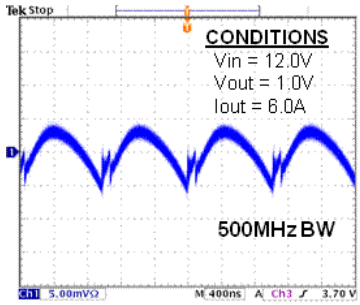
The EN2360QI is a member of the Enpirion® PowerSoC 12V DC-DC step-down converter family. When combined with the 5V and 6V step-down converters, designers of telecommunications, enterprise, storage systems, and industrial and embedded computing equipment have the broadest choice of integrated power management solutions for optimizing footprint and reliability in point-of-load applications without compromising efficiency, noise, or thermals.

Documentation

Request Datasheet at EN2360QI@altera.com

The EN2360QI capitalizes on our proven PowerSoC technology which integrates a controller, high-performance 12V MOSFET switches, compensation network, and inductor all in an 8 x 11 mm QFN package. With a total solution size of <200 mm², the EN2360QI is ideal for space-constrained applications that cannot sacrifice performance. The EN2360QI has peak efficiencies of 94% and excellent output voltage ripple.

Like all Enpirion products, the EN2360QI significantly reduces the traditional engineering analysis and design cycle associated with discrete DC-DC converter designs. Unlike discrete power solutions, the EN2360QI is a turnkey point-of-load power solution that gives the designer a complete power system that is fully simulated, characterized, and production tested.



Features

- Integrated inductor, MOSFETs, and controller
- Input voltage range: 4.5V to 14V
- Frequency synchronization (external clock)
- High efficiency (up to 94%)
- Output enable pin and power good signal
- Programmable soft-start
- Under-voltage lockout protection
- Thermal shutdown and short-circuit protection
- 8.0 mm x 11.0 mm x 3.0 mm 68-pin QFN package
- Fully RoHS compliant and Pb-free manufacturing line compatible